

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

- 5 1 (currently amended): A method for accessing discrete data comprising:
- (a) transmitting a write command to a memory;
 - (b) according to a data format of a file that is to be written into the memory, determining whether each data following a header of the file needs to be encrypted, and transmitting the file header and each data following the file header to a logic unit, wherein the data following the file header comprises one or a plurality of frames, in which each frame comprises a header, a data block and a residual block, wherein the remainder of the difference between the number of bytes of a frame and the number of bytes of the frame header divided by a predetermined integer is a first number, and the residual block is the set of the last first number bytes of the frame, wherein the header and the residual block of each frame are determined not to be encrypted, and the data block of each frame is determined to be encrypted;
 - (c) turning on the logic unit for encrypting the data determined to be encrypted in step (b) and writing the encrypted data into the memory;
 - (d) turning off the logic unit for writing the data determined not to be encrypted in step (b) into the memory directly; and
 - (e) sending a first response signal from the memory when the writing of the file is finished.
- 25 2 (cancelled)
- 30 3 (original): The method of claim 1 wherein the first response signal is a writing succeeded signal.
- 30 4 (original): The method of claim 1 transmitting the file header and each data

following the file header from a plurality of buffers in turn to the logic unit in step (b).

5 (original): The method of claim 1 wherein step (c) further comprises changing the
5 data format from little-endian to big-endian, or changing the data format from
big-endian to little-endian before writing the encrypted data into the memory.

6 (original): The method of claim 1 wherein the encryption algorithm is performed
according to the specification of content protection for recordable media (CPRM).

10

7 (currently amended): The method of claim 1 further comprising:

- (f) transmitting a read command to the memory;
- (g) according to a data format recorded in a header of a file that is to be read
from the memory, determining whether each data following the file header
needs to be decrypted, and transmitting the file header and each data
following the file header to a logic unit, wherein the data following the file
header comprises one or a plurality of frames, wherein each frame comprises
a header, a data block and a residual block, wherein the remainder of the
difference between the number of bytes of a frame and the number of bytes
15 of the frame header divided by the predetermined integer is a first number,
and the residual block is the set of the last first number bytes of the frame,
wherein the header and the residual block of each frame are determined not
to be decrypted, and the data block of each frame is determined to be
decrypted;
- 20 (h) turning on the logic unit for decrypting the data determined to be decrypted
in step (g) and writing the decrypted data into a buffer;
- (i) turning off the logic unit for writing the data determined not to be decrypted
in step (g) into the buffer directly; and
- (j) sending a second response signal from the memory when the writing of the
30 file is finished.

8 (cancelled)

9 (original): The method of claim 7 wherein the second response signal is a reading
5 succeeded signal.

10 (original): The method of claim 7 wherein the logic unit writes the data into a plurality of buffers in turn.

10 11 (original): The method of claim 7 wherein step (h) further comprises changing the data format from little-endian to big-endian, or changing the data format from big-endian to little-endian before writing the decrypted data into the buffer.

12 (original): The method of claim 7 wherein the decryption algorithm is performed
15 according to the specification of content protection for recordable media.

13 (original): The method of claim 1 wherein the memory is a flash memory.

14 (original): The method of claim 1 wherein the memory is a secure digital (SD)
20 card.

15 (original): The method of claim 1 wherein the memory is a digital video disk (DVD).

25 16 (original): The method of claim 1 wherein the file is an audio file.

17 (original): The method of claim 1 wherein the file is a video file.

18 (currently amended): A method for accessing discrete data comprising:

30 (a) transmitting a read command to a memory;

- (b) according to a data format recorded in a header of the file that is to be read from the memory, determining whether each data following the file header needs to be decrypted, and transmitting the file header and each data following the file header to a logic unit, wherein the data following the file header comprises one or a plurality of frames, wherein each frame comprises a header, a data block and a residual block, wherein the remainder of the difference between the number of bytes of a frame and the number of bytes of the frame header divided by a predetermined integer is a first number, and the residual block is the set of the last first number bytes of the frame,
5 wherein the header and the residual block of each frame are determined not to be decrypted, and the data block of each frame is determined to be decrypted;
- 10 (c) turning on the logic unit for decrypting the data determined to be decrypted in step (b) and writing the decrypted data into a buffer;
- 15 (d) turning off the logic unit for writing the data determined not to be decrypted in step (b) into the buffer directly; and
- (e) sending a first response signal from the memory when the writing of the file is finished.

20 19 (cancelled)

20 (original): The method of claim 18 wherein the first response signal is a reading succeeded signal.

25 21 (original): The method of claim 18 wherein the logic unit writes the data into a plurality of buffers in turn.

22 (original): The method of claim 18 wherein step (c) further comprises changing the data format from little-endian to big-endian, or changing the data format from 30 big-endian to little-endian before writing the decrypted data into the buffer.

23 (original): The method of claim 18 wherein the memory is a flash memory.

24 (original): The method of claim 18 wherein the memory is a secure digital (SD)

5 card.

25 (original): The method of claim 18 wherein the memory is a digital video disk (DVD).

10 26 (original): The method of claim 18 wherein the method of decryption is performed according to the decryption algorithm of the specification of content protection for recordable media.

27 (original): The method of claim 18 wherein the file is an audio file.

15

28 (original): The method of claim 18 wherein the file is a video file.

29 (currently amended): A discrete data accessing system comprising:

a memory for storing data;

20 a first logic unit electrically connected to the memory for encrypting input data according to a predetermined encryption algorithm, writing the encrypted data into the memory, or writing input data into the memory directly; and a second logic unit electrically connected to the first logic unit for determining whether each data following a header of a file that is to be written into the memory needs to be encrypted according to a data format of the file in order to decide whether to turn on the first logic unit for encrypting the input data and writing the encrypted data into the memory, or to turn off the first logic unit for writing the input data into the memory directly,
25 wherein the data following the file header comprises one or a plurality of frames, wherein each frame comprises a header, a data block and a

30

5 residual block, in which the remainder of the difference between the number of bytes of a frame and the number of bytes of the frame header divided by a predetermined integer is a first number, and the residual block is the set of the last first number bytes of the frame, wherein the header and the residual block of each frame are determined not to be encrypted, and the data block of each frame is determined to be encrypted by the second logic unit.

30 (cancelled)

10

31 (original): The system of claim 29 wherein the first logic unit is further capable of changing the data format from little-endian to big-endian, or changing the data format from big-endian to little-endian before writing the encrypted data into the memory.

15

32 (original): The system of claim 29 wherein the encryption algorithm is performed according to the specification of content protection for recordable media.

20

33 (currently amended): The system of claim 29 further comprising a buffer wherein the first logic unit is further capable of decrypting input data according to a predetermined decryption algorithm and writing the decrypted data into the buffer, or writing the input data into the buffer directly, and the second logic unit is further capable of determining whether each data following a header of a file that is to be read from the memory needs to be decrypted according to a data format recorded in the file header in order to decide whether to turn on the decryption function of the first logic unit for decrypting the input data and writing the decrypted data into the buffer, or to turn off the decryption function of the first logic unit for writing the input data into the buffer directly, wherein the data following the file header comprises one or a plurality of frames, in which each frame comprises a header, a data block and a residual block, wherein the

25

30

remainder of the difference between the number of bytes of a frame and the number of bytes of the frame header divided by the predetermined integer is a first number, and the residual block is the set of the last first number bytes of the frame, wherein the header and the residual block of each frame are determined not to be decrypted, and the data block of each frame is determined to be decrypted by the second logic unit.

5

34 (cancelled)

- 10 35 (original): The system of claim 33 wherein the first logic unit is further capable of changing the data format from little-endian to big-endian, or changing the data format from big-endian to little-endian before writing the decrypted data into the buffer.
- 15 36 (original): The system of claim 33 wherein the decryption algorithm is performed according to the specification of content protection for recordable media.
- 20 37 (currently amended): The system of claim 29 further comprising a buffer and a third logic unit wherein the third logic unit is capable of decrypting input data according to a predetermined decryption algorithm and writing the decrypted data into the buffer, or writing the input data into the buffer directly, and the second logic unit is further capable of determining whether each data following a header of a file that is to be read from the memory needs to be decrypted according to a data format recorded in the file header in order to decide whether to turn on the 25 decryption function of the third logic unit for decrypting the input data and writing the decrypted data into the buffer, or to turn off the decryption function of the third logic unit for writing the input data into the buffer directly, wherein the data following the file header comprises one or a plurality of frames, in which each frame comprises a header, a data block and a residual block, wherein the
- 25 remainder of the difference between the number of bytes of a frame and the
- 30 remainder of the difference between the number of bytes of a frame and the

number of bytes of the frame header divided by the predetermined integer is a first number, and the residual block is the set of the last first number bytes of the frame, wherein the header and the residual block of each frame are determined not to be decrypted, and the data block of each frame is determined to be decrypted by the second logic unit.

5

38 (cancelled)

39 (original): The system of claim 37 wherein the third logic unit is further capable of
10 changing the data format from little-endian to big-endian, or changing the data format from big-endian to little-endian before writing the decrypted data into the buffer.

40 (original): The system of claim 37 wherein the decryption algorithm is performed
15 according to the specification of content protection for recordable media.

41 (original): The system of claim 29 wherein the memory is a flash memory.

42 (original): The system of claim 29 wherein the memory is a secure digital (SD)
20 card.

43 (original): The system of claim 29 wherein the memory is a digital video disk (DVD).

25 44 (original): The system of claim 29 wherein the file is an audio file.

45 (original): The system of claim 29 wherein the file is a video file.

46 (currently amended): A discrete data accessing system comprising:

30 a memory for storing data;

a buffer for storing data;

5 a first logic unit electrically connected to the buffer for decrypting input data according to a predetermined decryption algorithm and writing the decrypted data into the buffer, or writing the input data into the buffer directly; and

10 a second logic unit electrically connected to the first logic unit for determining whether each data following a header of a file that is to be read from the memory needs to be decrypted according to a data format recorded in the file header in order to decide whether to turn on the decryption function of the first logic unit for decrypting the input data from the memory and writing the decrypted data into the buffer, or to turn off the decryption function of the first logic unit for writing the input data from the memory into the buffer directly, wherein the data following the file header comprises one or a plurality of frames, in which each frame comprises a header, a data block and a residual block, wherein the remainder of the difference between the number of bytes of a frame and the number of bytes of the frame header divided by a predetermined integer is a first number, and the residual block is the set of the last first number bytes of the frame, wherein the header and the residual block of each frame are determined not to be decrypted, and the data block of each frame is determined to be decrypted by the second logic unit.

15

20

47 (cancelled)

25 48 (original): The system of claim 46 wherein the first logic unit is further capable of changing the data format from little-endian to big-endian, or changing the data format from big-endian to little-endian before writing the decrypted data into the buffer.

30 49 (original): The system of claim 46 wherein the decryption algorithm is performed

according to the specification of content protection for recordable media.

50 (original): The system of claim 46 wherein the memory is a flash memory.

5 51 (original): The system of claim 46 wherein the memory is a secure digital (SD) card.

52 (original): The system of claim 46 wherein the memory is a digital video disk (DVD).

10

53 (original): The system of claim 46 wherein the file is an audio file.

54 (original): The system of claim 46 wherein the file is a video file.